

REMARKS

Claims 1, 2 and 4-22 are pending in this application. Claims 1, 7, 10, 21 and 22 are independent claims. By this amendment, claims 1, 7, 10, 21 and 22 are amended. Reconsideration in view of the above amendments and following remarks is respectfully solicited.

Applicants wish to thank Examiner Shelia Clark for the courtesies extended to Applicants' representative, Carolyn Baumgardner, during the October 22, 2003 telephonic interview. During the interview, the claim language and the distinguishing features of the claimed invention were discussed. The substance of the personal interview is summarized in the following remarks.

Bearing in mind the comments on page 3 of the Official Final Action regarding the allowability of the present application provided that the claim language is clarified, this application has been amended so as to place it into condition for allowance. An early indication of the same would be greatly appreciated.

Entry of the amendment is proper under 37 CFR §1.116 since the amendment:

(a) places the application in condition for allowance (for reasons discussed herein); (b) do not raise new issue requiring further search and/or consideration (since the amendment amplify issues previously discussed throughout prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding

number of finally rejected claims; and/or (e) places the application in better form for appeal, should an appeal be necessary. Entry of the amendment is thus respectfully requested.

Allowable Subject Matter

Applicants gratefully acknowledge the Examiner's indication of allowable subject matter in claims 10-20 over the art of record. The final Office Action also indicates that the claim language in the claims require clarification before the claims can be allowed. Applicants were asked to call the Examiner to discuss suggestions.

As a result of our October 22, 2003 telephonic interview, applicants respectfully submit that all of claims 1, 2 and 4-22 are allowable, for at least the reasons set forth below.

The Claims Satisfy The Requirements Of
35 U.S.C. §112, 2nd Paragraph

The Office Action rejects claims 1, 2, 4-9, 21 and 22 under 35 U.S.C. §112, 2nd paragraph. This rejection is respectfully traversed.

During the telephonic interview of October 22, 2003, applicants and the Examiner agreed upon claim language to clarify the stress feature.

As such, applicants respectfully submit that the amendments to claims 1, 7, 10, 21 and 22 obviate the rejection of claims 1, 2, 4-9, 21 and 22 under 35 U.S.C. §112, 2nd paragraph.

Accordingly, withdrawal of the rejection of claims 1, 2, 4-9, 21 and 22 under 35 U.S.C. §112, 2nd paragraph is respectfully solicited.

The Claims Define Patentable Subject Matter

The Office Action rejects: (1) claims 1, 2, 5, 7-9 and 22 under 35 U.S.C. §103(a) as being unpatentable over Applicants' Prior Art Figure 19 and the Admitted Prior Art in applicants' disclosure on pages 5-6. This rejection is respectfully traversed.

Applicants respectfully submit that the combination of cited art fails to teach or suggest each and every feature as set forth in the claimed invention.

The Office Action alleges that applicants' own disclosure on page 5, last paragraph, discloses semiconductor element 102 as being secured level onto a board 103, wherein the element is taught to operate normally when packaged on the board. The Office Action also asserts that applicants' specification discloses that element 2 may be peeled or detached from the board. (see page 2 of Office Action). However, applicants respectfully submit that such alleged disclosure in applicants' specification is not what is claimed.

As clarified at the personal interview and subsequent October 22, 2003 telephonic interview, the present invention relates to preventing any reliable analysis of a semiconductor element that is detached from a board after being secured to a board in a level position. Such a semiconductor element is design to operate only when the chip is maintained in this level position. At least part of the back of the semiconductor element is subjected to surface processing wherein a stress is applied to the element. The stress causes at least part of the element to deform when being detached from the board. As a result, any reliable analysis of the element once removed from the board is prohibited.

In this way, the present semiconductor device in the present application ensures that no reliable analysis can be conducted on the LSI circuit once the chip is detached, thus safe-guarding any secrets concealed therein.

In contrast to the present invention, the Examiner is relying on conventional disclosures contained in the present application. However, the conventional elements mentioned in applicants' specification fail to set forth a semiconductor element having a stress applied thereto, wherein this stress causes the element to deform when being detached from the board. The only thing that is disclosed about the conventional art is that it is secured level onto the board and that it continues to be level (non-deformed) once removed from the board. (see applicants' specification, page 5). As a result, unlike the present invention, the conventional chip 102 can be reliably analyzed once removed from the board, revealing any secrets contained therein.

Applicants respectfully submit that the final Office Action has failed to show how the cited art teaches each and every feature as set forth in the claimed invention, especially the surface processing and the stress applied therewith causing the chip to deform once detached.

Applicants respectfully submit that not only does the references fail to teach or suggest each and every feature as set forth in the claimed invention, but that one of ordinary skill in the art would not have been motivated to modify the teachings of the cited art because there is no teaching or suggestion regarding how or why one would modify such a device to arrive at the claimed invention.

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Applicants respectfully submit that independent claims 1, 7, 10, 21 and 22 are allowable over the cited art for at least the reasons noted above.

As for each of the dependent claims not particularly discussed above, these claims are also allowable for at least the reasons set forth above regarding their corresponding independent claims, and/or for the further features claimed therein.

Accordingly, withdrawal of the rejection of claims 1, 2, 5, 7-9 and 22 under 35 U.S.C. §103(a) is respectfully requested.

Conclusion


In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Carolyn T. Baumgardner (Reg. No. 41,345) at (703) 205-8000 to schedule a Personal Interview.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, the extension of time fees.

Respectfully submitted,
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